

function by echocardiography. After exclusion of patients in whom Angiotensin Converting Enzyme (ACE) inhibitors were contraindicated, only seventy-five (58%) patients received ACE inhibitors of whom, only 7 (9%) patients received the target dose recommended by the clinical practice guidelines. There was no documentation in the records regarding patient counselling about medication, diet, weight, exercise or smoking. **CONCLUSION:** ACE inhibitors were underused in elderly patients with heart failure; also achieving the target dose was poor. This data demonstrated a very low rate of use of echocardiography in elderly patients with heart failure. Counseling appeared to be a neglected aspect of patient care.

PCV13

IMPACT ON QUALITY ADJUSTED LIFE YEARS OF ENOXAPARIN FOR PREVENTING THROMBOSIS AMONG HOSPITALIZED MEDICAL PATIENTS

Raisch DW¹, Fye CL¹, Sather MR¹, Henderson WG², Reda DJ², Sacks JM², Lederle FL³

¹Veterans Affairs Cooperative Studies Program, Albuquerque, NM, USA; ²Veterans Affairs Cooperative Studies Program, Chicago, IL, USA; ³VA Medical Center, Minneapolis, MN, USA

OBJECTIVES: Prophylactic anticoagulants, such as low molecular weight heparin, to prevent thrombosis in hospitalized medical patients has been recommended in clinical guidelines, however the impact on quality adjusted life years (QALYs) is unclear. This pilot study evaluated enoxaparin for this indication among elderly (>age 59) hospitalized medical patients. **METHODS:** Patients were randomized to receive subcutaneous injections of enoxaparin 30 mg or placebo daily. Patients who had medical indications for anticoagulation (e.g., myocardial infarction, history of thrombosis) were excluded. QALYs were measured for the period of 30 to 90 days post randomization, using the Health Utilities Index (HUI). At 30 and 90 days, 51 and 40 patients in the active group completed the HUI versus 49 and 36 patients in the placebo group, respectively. Surveys were received at both time points among 40 enoxaparin and 21 placebo patients. QALYs and changes in domain scores were analyzed over the time between the two surveys. Data were analyzed using t-tests. **RESULTS:** Significantly more QALYs were gained ($p = .007$) among enoxaparin treated patients. The mean QALY values were 0.005 ± 0.015 vs -0.008 ± 0.015 . The change in the HUI, Mark III domain score for ambulation approached significance ($p = 0.053$). The mean values were 0.012 ± 0.098 for enoxaparin versus -0.027 ± 0.056 for placebo. A significant change in the HUI, Mark II domain score for mobility was found ($p = 0.017$, mean values 0.015 ± 0.064 versus -0.022 ± 0.050). **CONCLUSION:** Among medical patients prophylactic treatment with enoxaparin was associated with increased QALYs.

PCV14

IMPACT OF OBESITY ON HEALTH-RELATED QUALITY OF LIFE (HRQOL): AN ANALYSIS OF BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (BRFSS) DATA

Hassan M, Joshi AV, Madhavan S, Amonkar M

West Virginia University School of Pharmacy, Morgantown, WV, USA

OBJECTIVES: With over one-third of the population considered to be obese, obesity has reached epidemic proportions in the US. The direct costs associated with obesity are currently estimated at about \$238 billion. As the underlying cause of various chronic diseases, obesity negatively impacts quality of life due to impaired physical and mental well being and reduced daily functions. The objective of this study is to evaluate the relationship between obesity and health-related quality of life using the Centers for Disease Control and Prevention's (CDC) Behavioral Risk Factor Surveillance System (BRFSS) data. **METHODS:** The BRFSS is an ongoing, state-based, random digit dialed telephone survey of the civilian, non-institutionalized population aged ≥ 18 years conducted by CDC. Data from sixteen states that collected information on health status (4 items), HRQoL (10 items), and demographic characteristics including weight and height from 50,454 participants in 1998 were utilized for the analysis. Participants who had a Body Mass Index (BMI) ≥ 30 were defined as obese. Prevalence of obesity by demographics and disease presence was determined, as were corresponding HRQoL scores. **RESULTS:** On the basis of BMI, 31.9% of the respondents were identified as obese. Obesity was higher in males as compared to females and higher among African-Americans and Hispanics as compared to whites. Obesity increased with age but decreased as income and education increased. Obese respondents reported poorer health status. Impact of obesity on HRQoL due to reduced physical and mental functioning in the presence of no health problems, as well as in presence of self-reported major health problems such as arthritis, cardiovascular disease, diabetes, cancer, depression, and pulmonary disease is discussed. **CONCLUSIONS:** Health related quality of life is significantly affected due to obesity and should be an important consideration in the treatment of obesity. It also has important implications in case of illnesses that have obesity as an underlying cause.

PCV15

ECONOMIC EVALUATION OF OUTPATIENT ANTICOAGULANT/ANTIPLATELET THERAPY FOLLOWING CORONARY STENTING IN A MANAGED CARE POPULATION

Liao E, Fronk M, Newell J, Huse D

PharMetrics, Inc, Watertown, MA, USA

OBJECTIVE: To determine the impact of outpatient anticoagulant/antiplatelet therapy on treatment charges in

patients receiving coronary artery stents in a managed care population. **METHODS:** Patients were selected from the PharMetrics Integrated Outcomes Database who underwent coronary angioplasty and stent insertion between January 1 and June 30, 1999 and who had at least 6 months of continuous enrollment in their health plan following the beginning of the treatment episode. Patients were grouped according to whether they received outpatient anticoagulant/antiplatelet prescription drug therapy following their stent procedure. Patients were also stratified by history of acute myocardial infarction (AMI) and presence of comorbid conditions (diabetes and hypertension). Total charges associated with the stenting treatment episode (up to 6 months following the procedure) were assessed. **RESULTS:** 2,713 patients receiving anticoagulant/antiplatelet therapy and 438 untreated patients met all selection criteria. The two treatment groups were similar in age (58.6 vs. 58.0 years respectively, $p = 0.322$) and in the frequency of AMI (37.7% vs. 37.9% respectively, $p = 0.939$) and of one or more comorbidities (73.3% vs. 71.5% respectively, $p = 0.427$). Mean charges over the study period for the anticoagulant/antiplatelet cohort exceeded those in the untreated cohort by \$4,748 ($p = 0.014$). Pharmacy charges accounted for only \$297 of this excess (\$660 vs. \$363, respectively). Most of the difference between treatment groups was in the medical costs of interventional cardiology. **CONCLUSION:** Among coronary stent recipients, the mean charge for a 6-month period in patients who also received anticoagulant/antiplatelet prescription drug therapy was 14% higher than in the untreated cohort, due mainly to higher medical charges. It is possible that untreated patients were less severely ill or had a favorable risk profile. Further investigation of these data will examine this issue.

PCV16

COST-EFFECTIVENESS ANALYSIS OF ENOXAPARIN VERSUS UNFRACTIONATED HEPARIN IN ACUTE CORONARY SYNDROME PATIENTS IN POLAND

Orlewska E¹, Budaj A², Tereszowski-Kaminski D³

¹Medical University of Warsaw, Warsaw, Poland; ²Postgraduate Medical School, Grochowski Hospital, Warsaw, Poland;

³Uniformed Services Health Fund, Warsaw, Poland

OBJECTIVE: To estimate the cost-effectiveness of enoxaparin (1 mg/kg s.c. bid) vs unfractionated heparin (UFH) (i.v. bolus and constant infusion adjusted to maintain a therapeutic APTT) in acute coronary syndrome (ACS) patients from a Polish hospital perspective. The intention was to facilitate the decision-making process in selecting the most cost-effective treatment for ACS. **METHODS:** Decision model was used to quantify costs and effectiveness of alternative treatments. Published results from ESSENCE study were used to estimate the probability for clinical end-points (death, MI, recurrent

angina) at 30 days. Probabilities of patients receiving revascularisation procedures were obtained from the GRACE registry (961 patients at 6 centres in Poland). The analysis assessed only direct medical costs resulting from the treatment of events comprising the composite end-point, revascularisation procedures, enoxaparin and UFH therapy, related medications. The costs were determined from actual resource consumption on a patient-specific basis (6 months observational study) and estimated using Polish data on unit costs. One- and two-way sensitivity analysis and threshold analysis were performed. **RESULTS:** At 30 days 19.8% of patients receiving enoxaparin compared with 23.3% of patients receiving UFH reached one event of the composite end-point ($p = 0.02$). The average costs (in PLN, 1 USD = 4 PLN) were 1085 per patient receiving enoxaparin compared with 1097 per patient receiving UFH. Therefore for every 29 patients treated, enoxaparin therapy would not only avoid one event of the composite end-point, it would also save 348 PLN. The threshold analysis revealed, that enoxaparin would lose the dominance, when cost of enoxaparin therapy would increase by 30%, cost of UFH—decrease by 47%, probability end-point in enoxaparin arm increase to 0.22 or in UFH arm decrease to 0.2. **CONCLUSION:** Since enoxaparin resulted in a better effect at a lower cost, this antithrombotic strategy was considered to be dominant for Polish patients with ACS.

PCV17

QUALITY OF LIFE AND PATIENT PREFERENCE AS PREDICTORS FOR RESOURCE UTILIZATION AMONG PATIENTS WITH HEART FAILURE; INTERIM ANALYSIS

Shin GP¹, Tooley JF², Southworth MR¹, Dunlap S¹, Boyer JG², Johnson NE¹

¹University of Illinois at Chicago, Chicago, IL, USA; ²Pharmacia, Skokie, IL, USA

OBJECTIVE: The objective of this study was to examine the role of quality of life (QOL) and patient preference as predictors for resource utilization among patients with heart failure (HF). **METHODS:** QOL, patient preference, resource utilization, and survival are being assessed in 94 patients with HF managed in an urban HF specialty clinic. QOL is measured using a disease-specific questionnaire, the Kansas City Cardiomyopathy Questionnaire (KCCQ) and a generic questionnaire, the Short Form 12 (SF-12), at baseline, 3 months, and 6 months. Patient preference is measured using standard gamble technique at baseline. Resource use including hospitalization, ER visits, procedures, and outpatient visits are captured by patient interview and verified by clinic and hospital records. Health care costs are derived from clinic cost data, University Health System Consortium database, and literature. **RESULTS:** To date, 81 patients have completed 3 months follow-up (mean age 49.9 ± 14.0 years; 69% African American; 53% male; NYHA class I = 15,